

ABSTRACT

A web of radio frequency identification (RFID) devices includes a conductive layer atop an insulating layer, the conductive layer having one or more apertures therein. Alternatively, the web may not include an insulating layer. RFID chips or straps are electrically coupled to portions of the conductive layer on either side of an aperture, for use as antennas when the RFID devices are separated from one another, as by cutting. The apertures may be formed by creasing portions of the web, and removing parts of the creased portion. There may be one or more apertures in a longitudinal or transverse direction of the web. The antenna shapes of various of the RFID devices may be tessellated, nesting within one another or having the same boundary, thereby improving efficiency by using substantially all of the conductive material. The RFID devices may be tested and/or programmed while remaining in the web format.